

WHAT IS CLAIMED IS:

1. An image forming system, comprising a computer, a first image forming apparatus capable of performing only monochrome printing, and a second image forming apparatus capable of performing color printing, which are connected with each other via a network, wherein

said computer has:

(a) a page-number appending function of appending page numbers onto job data,

(b) a job-data dividing function of dividing said job data into monochromatic print data and color print data,

(c) a job-data allocating function of allocating said monochromatic print job data and color print job data divided through said job-data dividing function, respectively, to said first image forming apparatus and said second image forming apparatus, and

(d) a data-transmitting/receiving function of transmitting said monochromatic print job data to said first image forming apparatus via said network, and transmitting said color print job data to said second image forming apparatus via said network in response to reception of a job-process-continuation signal from said second image forming apparatus after receiving a job-completion signal from said first image forming apparatus,

said first image forming apparatus includes:

(a) first image formation means for forming a monochrome image on each of first recording materials in accordance with said monochromatic print job data transmitted from said computer,

(b) job-completion detection means for detecting completion of said monochromatic print job and then outputting said job-completion signal to said computer, and

(c) first communication means for allowing data communication with said computer via said network,

said second image forming apparatus includes:

(a) second image formation means for forming a color image on each of second recording materials in order of page number in accordance with said color print job data transmitted from said computer,

(b) recording-material feed means for feeding said second recording materials to said second image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said second recording materials fed from said recording-material feed means and color-printed by said second image formation means, to said post-processing tray, so as to subject said second recording materials on said post-processing tray to a post-processing and then discharge said second recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said second recording materials fed from said recording-material feed means and color-printed by said second image formation means, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering said job-process continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said

job-process-continuation signal to be output to said computer only after said first recording materials with monochrome images formed by said first image forming apparatus are set on said post-processing tray of said post-processing device,

(e) second communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said second image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said second communication means, and

said image-formation control means has:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation-signal input means, said second recording materials color-printed by said second image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serving as a second discharge section to discharge said first recording materials set on said post-processing tray, onto said recording-material discharge tray without subjecting said first recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said color print job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing means to allow color pages and monochrome pages to be

mixed together while serializing their page numbers in a sequential order.

2. An image forming system comprising a plurality of image forming apparatuses and a computer, which are connected with each other via a network, wherein each of said image forming apparatuses is adapted to be operated in accordance with job data from said computer, wherein

said computer has:

(a) a page-number appending function of appending page numbers onto said job data,

(b) a job-data dividing function of dividing said job data in accordance with a given dividing rule,

(c) a job-data allocating function of allocating plural job data divided through said job-data dividing function, respectively, to specified image forming apparatuses, and

(d) a data-transmitting/receiving function of transmitting said plural job data allocated through said job-data allocating function, to said corresponding image forming apparatuses via said network,

at least one of said image forming apparatuses includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with said job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein

said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and formed with images, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and

said first discharge section is adapted to discharge said first recording materials fed from said recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering a job-process-continuation-signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with images formed by another one of said image forming apparatuses are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said image-formation control means has:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal

entered from said job-process-continuation- signal input means, said first recording materials with images formed by said image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said job data transmitted from said computer, and switching said respective operations of said recording-material feed means and said post-processing device to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

3. An image forming system comprising a plurality of image forming apparatuses and a computer, which are connected with each other via a network, wherein each of said image forming apparatuses is adapted to be operated in accordance with job data from said computer, wherein

said computer has:

(a) a page-number appending function of appending page numbers onto said job data,

(b) a job-data dividing function of dividing said job data in accordance with a given dividing rule,

(c) a job-data allocating function of allocating plural job data divided through said job-data dividing function, respectively, to specified image forming apparatuses, and

(d) a data-transmitting/receiving function of transmitting said plural job data allocated through said job-data allocating function, to said corresponding image forming apparatuses via said network,

at least one of said plurality of image forming apparatuses includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with said job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials on said double-side-printing intermediate tray to said image formation means,

(d) a third recording-material feed means having a recording-material receiving section for placing thereon second recording materials with images formed by another one of said image forming apparatuses in order of page number, wherein said third recording-material feed means is adapted to feed said second recording materials placed on said recording-material receiving section to said image formation means,

(e) job-process-continuation-signal input means for entering a signal for initiating to feed said first and second recording materials through said second and third recording-material feed means, respectively, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said recording-material receiving section of said third recording-material feed means,

(f) recording-material discharge means for discharging said first and second recording materials fed from said second and third recording-material feed means, onto a recording-material discharge tray,

(g) communication means for allowing data communication with said computer via said network, and

(h) image-formation control means for controlling respective operations of said image formation means, said first to third recording-material feed means, said job-process-continuation-signal input means, said recording-material discharge means and said communication means, and

said image-formation control means has:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during a feeding of said first recording materials through said first recording-material feed means, and disabling a printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means, and

(2) a function of checking said page numbers of said job data transmitted from said computer, and switching respective operations of said



second recording-material feed means and said third recording-material feed means to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

4. An image forming system comprising a plurality of image forming apparatuses and a computer, which are connected with each other via a network, wherein each of said image forming apparatuses is adapted to be operated in accordance with job data from said computer, wherein

said computer has:

(a) a page-number appending function of appending page numbers onto said job data,

(b) a job-data dividing function of dividing said job data in accordance with a given dividing rule,

(c) a job-data allocating function of allocating plural job data divided through said job-data dividing function, respectively, to specified image forming apparatuses, and

(d) a data-transmitting/receiving function of transmitting said plural job data allocated through said job-data allocating function, to said corresponding image forming apparatuses via said network,

at least one of said plurality of image forming apparatuses includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with said job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials from said double-side-printing intermediate tray to said image formation means,

(d) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from either one of said first and second recording-material feed means and formed with images, onto said post processing tray so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from either one of said first and second recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(e) job-process-continuation-signal input means for entering a signal for initiating an operation of mixing said first recording materials fed through said second recording-material feed means, and second recording materials with images formed by another one of said image forming apparatuses, wherein said job-process-continuation-signal input means is adapted to allow

said signal to be entered therethrough only after said second recording materials are set on said post-processing tray of said post-processing device,

(f) communication means for allowing data communication with said computer via said network, and

(g) image-formation control means for controlling respective operations of said image formation means, said first and second recording-material feed means, said post-processing device, said job-process-continuation-signal input means, and said communication means, and

said image-formation control means has:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during said feeding of said first recording materials through said first recording-material feed means without said signal to be entered from said job-process-continuation-signal input means, and disabling a printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means,

(2) a function of switching an operation of said post-processing device in such a manner that when said signal is entered from said job-process-continuation-signal input means, and said first recording materials are fed through said second recording-material feed means, said first recording materials fed from said second recording-material feed means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray

without subjecting said second recording materials placed on said post-processing tray to said post-processing, and

(3) a recording-material mixing function of checking said page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said post-processing section to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

5. An image forming apparatus capable of performing color printing, wherein said image forming apparatus is connected to a computer via a network together with another image forming apparatus capable of performing only monochrome printing, wherein

said image forming apparatus includes:

(a) image formation means for forming a color image on each of first recording materials in order of page number in accordance with color print job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and color-printed by said image formation means, to said post-processing tray, so as to subject said first

recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said recording materials fed from said recording-material feed means and color-printed by said image formation means, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering said job-process continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with monochrome images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said image-formation control means has:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation signal input means, said first recording materials color-printed by said image formation means are discharged directly onto said recording-material discharge tray through said

first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials set on said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said color print job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing means to allow color pages and monochrome pages to be mixed together while serializing their page numbers in a sequential order.

6. An image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein

said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and formed with images, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then

discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and

said first discharge section is adapted to discharge said first recording materials fed from said recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(d) job-process-continuation signal input means for entering a job-process-continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said image-formation control means has:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation-signal input means, said first recording materials with images formed by said image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second

discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing device to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

7. An image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said



first recording materials on said double-side-printing intermediate tray to said image formation means,

(d) a third recording-material feed means having a recording-material receiving section for placing thereon second recording materials with images formed by said another image forming apparatus in order of page number, wherein said third recording-material feed means is adapted to feed said second recording materials placed on said recording-material receiving section to said image formation means,

(e) job-process-continuation-signal input means for entering a signal for initiating to feed said first and second recording materials through said second and third recording-material feed means, respectively, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said recording-material receiving section of said third recording-material feed means,

(f) recording-material discharge means for discharging said first and second recording materials fed from said second and third recording-material feed means, onto a recording-material discharge tray,

(g) communication means for allowing data communication with said computer via said network, and

(h) image-formation control means for controlling said respective operations of image formation means, said first to third recording-material feed means, said job-process-continuation-signal input means, said recording-material discharge means and said communication means, and

said image-formation control means has:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during said feeding of said first recording materials through said first recording-material feed means, and disabling said printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means, and

(2) a function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said third recording-material feed means to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

8. An image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with said job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording

materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials from said double-side-printing intermediate tray to said image formation means,

(d) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from either one of said first and second recording-material feed means and formed with images, onto said post processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from either one of said first and second recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(e) job-process-continuation-signal input means for entering a signal for initiating an operation of mixing said first recording materials fed through said second recording-material feed means, and second recording materials with images formed by another one of said image forming apparatuses, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said post-processing tray of said post-processing device,

(f) communication means for allowing data communication with said computer via said network, and

(g) image-formation control means for controlling respective operations

of said image formation means, said first and second recording-material feed means, said post-processing device, said job-process-continuation-signal input means, and said communication means, and

said image-formation control means has:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during said feeding of said first recording materials through said first recording-material feed means without said signal to be entered from said job-process-continuation-signal input means, and disabling a printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means,

(2) a function of switching an operation of said post-processing device in such a manner that when said signal is entered from said job-process-continuation-signal input means, and said first recording materials are fed through said second recording-material feed means, said first recording materials fed from said second recording-material feed means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials placed on said post-processing tray to said post-processing, and

(3) a recording-material mixing function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said

post-processing section to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

9. An operation control method for an image forming apparatus capable of performing color printing, wherein said image forming apparatus is connected to a computer via a network together with another image forming apparatus capable of performing only monochrome printing, and provided with:

(a) image formation means for forming a color image on each of first recording materials in order of page number in accordance with color print job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and color-printed by said image formation means, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from recording-material feed means and color-printed by said image formation

means, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering said job-process-continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with monochrome images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said operation control method comprises operating said image-formation control means to perform:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation-signal input means, said first recording materials color-printed by said image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials set on said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to

said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said color print job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing means to allow color pages and monochrome pages to be mixed together while serializing their page numbers in a sequential order.

10. An operation control method for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein

said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and formed with images, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and

said first discharge section is adapted to discharge said first recording

materials fed from said recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering a job-process-continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling said respective operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said operation control method comprises operating said image-formation control means to perform:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation-signal input means, said first recording materials with images formed by said image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without



subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing device to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

11. An operation control method for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials on said double-side-printing intermediate tray to

said image formation means,

(d) a third recording-material feed means having a recording-material receiving section for placing thereon second recording materials with images formed by said another image forming apparatus in order of page number, wherein said third recording-material feed means is adapted to feed said second recording materials placed on said recording-material receiving section to said image formation means,

(e) job-process-continuation-signal input means for entering a signal for initiating to feed said first and second recording materials through said second and third recording-material feed means, respectively, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said recording-material receiving section of said third recording-material feed means,

(f) recording-material discharge means for discharging said first and second recording materials fed from said second and third recording-material feed means, onto a recording-material discharge tray,

(g) communication means for allowing data communication with said computer via said network, and

(h) image-formation control means for controlling respective operations of said image formation means, said first to third recording-material feed means, said job-process-continuation-signal input means, said recording-material discharge means and said communication means, and

said operation control method comprises operating said image-formation control means to perform:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during said feeding of said first recording materials through said first recording-material feed means, and disabling said printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means, and

(2) a function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said third recording-material feed means to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

12. An operation control method for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with said job data transmitted from said computer, (b) a first recording-material feed means for feeding said first recording materials to said image formation means,:

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording

materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials from said double-side-printing intermediate tray to said image formation means,

(d) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from either one of said first and second recording-material feed means and formed with images, onto said post processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from either one of said first and second recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(e) job-process-continuation- signal input means for entering a signal for initiating an operation of mixing said first recording materials fed through said second recording-material feed means, and second recording materials with images formed by another one of said image forming apparatuses, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said post-processing tray of said post-processing device,

(f) communication means for allowing data communication with said computer via said network, and

(g) image-formation control means for controlling respective operations of said image formation means, said first and second recording-material feed means, said post-processing device, said job-process-continuation-signal input means, and said communication means, and

said operation control method comprises operating said image-formation control means to perform:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during feeding of said first recording materials through said first recording-material feed means without said signal to be entered from said job-process-continuation-signal input means, and disabling a printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means,

(2) a function of switching an operation of said post-processing device in such a manner that when said signal is entered from said job-process-continuation-signal input means, and said first recording materials are fed through said second recording-material feed means, said first recording materials fed from said second recording-material feed means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials placed on said post-processing tray to said post-processing, and

(3) a recording-material mixing function of checking page numbers of

said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said post-processing section to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order.

13. A program product for verifying an operational status of a computer comprising:

(A) a control program for an image forming apparatus capable of performing color printing, wherein said image forming apparatus is connected to a computer via a network together with another image forming apparatus capable of performing only monochrome printing, and provided with:

(a) image formation means for forming a color image on each of first recording materials in order of page number in accordance with color print job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said recording materials fed from said recording-material feed means and color-printed by said image formation means, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and

then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from said recording-material feed means and color-printed by said image formation means, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering said job-process continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with monochrome images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling respective operations of said image formation means, said recording-material feed means, said post-processing means, said job-process-continuation-signal input means and said communication means, and

said control program comprises sequence of instructions to be executed within said image forming apparatus so as to allow said image-formation control means to perform:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation signal input means, said first recording materials color-printed by said image formation means are

discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials set on said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking said page numbers of said color print job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing means to allow color pages and monochrome pages to be mixed together while serializing their page numbers in a sequential order, and

(B) a signal bearing media bearing said control program.

14. The program product of claim 13, wherein said signal bearing media comprises at least one of a transmission-type media and a recordable media.

15. A program product for verifying an operational status of a computer comprising:

(A) a control program for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first



recording materials in order of page number in accordance with job data transmitted from said computer,

(b) recording-material feed means for feeding said first recording materials to said image formation means,

(c) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein

said post-processing section is adapted to guide said first recording materials fed from said recording-material feed means and formed with images, to said post-processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and

said first discharge section is adapted to discharge said first recording materials fed from said recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(d) job-process-continuation-signal input means for entering a job-process-continuation signal therethrough, wherein said job-process-continuation-signal input means is adapted to allow said job-process-continuation signal to be output to said computer only after second recording materials with images formed by said another image forming apparatus are set on said post-processing tray of said post-processing device,

(e) communication means for allowing data communication with said computer via said network, and

(f) image-formation control means for controlling said respective

operations of said image formation means, said recording-material feed means, said post-processing device, said job-process-continuation-signal input means and said communication means, and

said control program comprises sequence of instructions to be executed within said image forming apparatus so as to allow said image-formation control means to perform:

(1) a function of switching an operation of said post-processing device in such a manner that in response to said job-process-continuation signal entered from said job-process-continuation-signal input means, said first recording materials with images formed by said image formation means are discharged directly onto said recording-material discharge tray through said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials set on said post-processing tray to said post-processing, and

(2) a recording-material mixing function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said recording-material feed means and said post-processing device to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order, and

(B) a signal bearing media bearing said control program.

16. The program product of claim 15, wherein said signal bearing media comprises at least one of a transmission-type media and a recordable media.

17. A program product for verifying an operational status of a computer comprising:

(A) a control program for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,;

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials on said double-side-printing intermediate tray to said image formation means,

(d) a third recording-material feed means having a recording-material receiving section for placing thereon second recording materials with images formed by said another image forming apparatus in order of page number,

wherein said third recording-material feed means is adapted to feed said second recording materials placed on said recording-material receiving section to said image formation means,

(e) job-process-continuation-signal input means for entering a signal for initiating to feed said first and second recording materials through said second and third recording-material feed means, respectively, wherein said job-process-continuation-signal input means is adapted to allow said signal to be entered therethrough only after said second recording materials are set on said recording-material receiving section of said third recording-material feed means,

(f) recording-material discharge means for discharging said first and second recording materials fed from said second and third recording-material feed means, onto a recording-material discharge tray,

(g) communication means for allowing data communication with said computer via said network, and

(h) image-formation control means for controlling respective operations of said image formation means, said first to third recording-material feed means, said job-process-continuation-signal input means, said recording-material discharge means and said communication means, and

said control program comprises sequence of instructions to be executed within said image forming apparatus so as to allow said image-formation control means to perform:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during feeding of said first recording materials through said first recording-material feed means,

and disabling printing operation of said image formation means in response to said signal entered from said job-process-continuation signal input means, and

(2) a function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said third recording-material feed means to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order, and

(B) a signal bearing media bearing said control program.

18. The program product of claim 17, wherein said signal bearing media comprises at least one of a transmission-type media and a recordable media.

19. A program product for verifying an operational status of a computer comprising:

(A) a control program for an image forming apparatus connected to a computer via a network together with another image forming apparatuses, wherein

said image forming apparatus includes:

(a) image formation means for forming an image on each of first recording materials in order of page number in accordance with job data transmitted from said computer,

(b) a first recording-material feed means for feeding said first recording materials to said image formation means,

(c) a second recording-material feed means having a double-side-printing intermediate tray, wherein said second recording-material feed means is adapted to place said first recording materials fed from said first recording-material feed means and formed with images, onto said double-side-printing intermediate tray, and then feed said first recording materials from said double-side-printing intermediate tray to said image formation means,

(d) a post-processing device having a post-processing section with a post-processing tray, and a first discharge section, wherein said post-processing section is adapted to guide said first recording materials fed from either one of said first and second recording-material feed means and formed with images, onto said post processing tray, so as to subject said first recording materials on said post-processing tray to a post-processing and then discharge said first recording materials from said post-processing tray onto a recording-material discharge tray, and said first discharge section is adapted to discharge said first recording materials fed from either one of said first and second recording-material feed means and formed with images, directly onto said recording-material discharge tray,

(e) job-process-continuation-signal input means for entering a signal for initiating an operation of mixing said first recording materials fed through said second recording-material feed means, and second recording materials with images formed by another one of said image forming apparatuses, wherein said job-process-continuation-signal input means is

adapted to allow said signal to be entered therethrough only after said second recording materials are set on said post-processing tray of said post-processing device,

(f) communication means for allowing data communication with said computer via said network, and

(g) image-formation control means for controlling respective operations of said image formation means, said first and second recording-material feed means, said post-processing device, said job-process-continuation-signal input means, and said communication means, and

said control program comprises sequence of instructions to be executed within said image forming apparatus so as to allow said image-formation control means to perform:

(1) a printing ON/OFF function of operating said image formation means to form images on said first recording materials during feeding of said first recording materials through said first recording-material feed means without said signal to be entered from said job-process-continuation-signal input means, and disabling a printing operation of said image formation means in response to said signal entered from said job-process-continuation-signal input means,

(2) a function of switching an operation of said post-processing device in such a manner that when said signal is entered from said job-process-continuation-signal input means, and said first recording materials are fed through said second recording-material feed means, said first recording materials fed from said second recording-material feed means are discharged directly onto said recording-material discharge tray through

said first discharge section, and said post-processing section serves as a second discharge section to discharge said second recording materials from said post-processing tray onto said recording-material discharge tray without subjecting said second recording materials placed on said post-processing tray to said post-processing, and

(3) a recording-material mixing function of checking page numbers of said job data transmitted from said computer, and switching respective operations of said second recording-material feed means and said post-processing section to allow said second recording materials with images formed by said another image forming apparatus and said first recording materials with images formed by said image formation means to be mixed together while serializing their page numbers in a sequential order, and

(B) a signal bearing media bearing said control program.

20. The program product of claim 19, wherein said signal bearing media comprises at least one of a transmission-type media and a recordable media.